What is claimed is:

20

A card type optical transceiver module comprising:
 an optical receptacle having a photoelectric
 component for converting, an electrical signal into an
 optical signal, and in reverse, an optical signal into an
electrical signal, respectively;

an electrical connector electrically connected to an electronic device:

a motherboard and a childboard, which are separately formed and electrically connect the optical receptacle and the electrical connector:

- a first cutaway portion provided in the motherboard;
- a group of pins electrically connect the motherboard and the childboard: wherein
- the optical receptacle is supported in a housing which forms an outer contour of the card type optical transceiver module.

the first cutaway portion accepts the optical receptacle inside so as to avoid an interference between the optical receptacle and the motherboard,

 $\label{eq:the_constraint} \mbox{the electrical connector is disposed on an edge} \\ \mbox{surface of the housing.}$

- 2. The card type optical transceiver module as claimed in claim 1, wherein the childboard is supported in the housing at a position below the motherboard but between the electrical connector and the optical receptacle.
- 3. The card type optical transceiver module as claimed in claim 1, wherein there is a gap between an inner perimeter of a through hole provided in either one of the motherboard or the childboard and an outer perimeter of a pin among the group of pins which is inserted into and penetrates the through hole.

5

5

- 4. The card type optical transceiver module as claimed in claim 3, wherein a distance between the motherboard and the childboard is adjusted according to a penetrating length of the pin inserted into the through hole.
- 5. The card type optical transceiver module as claimed in claim 1, wherein the housing may be a CF card type or a PC card type.
- 6. The card type optical transceiver module as claimed in claim 1, wherein the optical receptacle

incorporated in the housing is reinforced against an external force with a reinforcement material.

- 7. The card type optical transceiver module as claimed in claim 1, wherein the motherboard has a second cutaway portion, into which an electronic component mounted on the childboard is accepted.
- 8. The card type optical transceiver module as claimed in claim 1, wherein an optical waveguide board of the optical receptacle is mounted on the childboard, and the photoelectric component includes a photo diode for reception, a laser diode for transmission, and a photo diode for monitoring output power of the laser diode.

5

- 9. The card type optical transceiver module as claimed in claim 8, wherein the optical module includes a WDM filter which reflects either one of an received light or a transmitting light and allows another one to penetrate in accordance with each wave length.
- 10. The card type optical transceiver module as claimed in claim 1, wherein the optical receptacle has a single-core bi-directional transmission in which a transmission and a reception are performed via a single

5 optical fiber.

5

- 11. The card type optical transceiver module as claimed in claim 1, wherein the optical receptacle has a multi-core bi-directional transmission in which a transmission and a reception are performed via a plurality of independent optical fibers.
- 12. The card type optical transceiver module as claimed in claim 8, wherein the optical receptacle is configured in such a manner that an optical fiber is inserted and fixed in a V-shaped groove of the optical waveguide board.
 - 13. The card type optical transceiver module as claimed in claim 1, wherein the childboard is provided with a stress dispersing unit which disperses a stress from the optical receptacle.
 - 14. The card type optical transceiver module as claimed in claim 1, wherein the electrical connector is such a type as being connected through convexes and concaves formed by pins.
 - 15. The card type optical transceiver module as

claimed in claim 1, wherein the childboard is supported by the housing, and the motherboard is supported by the group of pins and incorporated in the housing.